

JAPIO

(c) 2008 JPO & JAPIO. All rights reserved.

02961058 \*\*Image available\*\*

**PRODUCTION OF IMIDES**

**Pub. No.:** 01-258658 [JP 1258658 A ]

**Published:** October 16, 1989 (19891016)

**Inventor:** KUDO MASAOKI

TAMASHIMA HITOSHI

YABUTANI KUNIHIRO

**Applicant:** NIPPON NOHYAKU CO LTD [330253] (A Japanese Company or Corporation), JP (Japan)

**Application No.:** 63-084883 [JP 8884883]

**Filed:** April 06, 1988 (19880406)

**International Class:** [ 4 ] C07D-209/48; C07D-487/04

**JAPIO Class:** 14.1 (ORGANIC CHEMISTRY -- Organic Compounds); 14.4 (ORGANIC CHEMISTRY -- Medicine)

**Journal:** Section: C, Section No. 674, Vol. 14, No. 14, Pg. 149, January 12, 1990 (19900112)

**ABSTRACT**

**PURPOSE:** To easily obtain the subject compound useful as agricultural chemicals, pharmaceuticals and their intermediates, by reacting a specific organic halide available at a low cost with CO and amines in the presence of a specific catalyst and a base.

**CONSTITUTION:** The imides of formula VI can be produced e.g. by reacting an organic halide of formula IV ( $R^{(sup 1)}$  is (substituted)alicyclic hydrocarbon group, etc.; Y is halogen; m is integer of  $\geq 2$ ) with carbon monoxide and amines of formula V ( $R^{(sup 2)}$  is H, etc.) (e.g.  $NH^{(sub 3)}$ , methylamine or ethylenediamine) in the presence of catalysts (Pd compound and a phosphine compound) and a base (e.g.  $Na^{(sub 2)}CO^{(sub 3)}$ ,  $K^{(sub 2)}CO^{(sub 3)}$  or NaOH). The amount of the amine of formula V is 1-2mol per 1mol of a pair of adjacent halogen atoms on the ring of the organic halide.